FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	M03738	Client:	Alaskan Copper Works
Date Received:	02/26/09	Project:	Standard Press, PO M03738
Date Extracted:	02/26/09	Lab ID:	902261-01
Date Analyzed:	02/27/09	Data File:	022707.D
Matrix:	Product	Instrument:	GCMS5
Units:	mg/kg (ppm)	Operator:	MB

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	67	133
Toluene-d8	108	70	130
4-Bromofluorobenzene	107	76	145

Compounds:	Concentration ug/g (ppm)
Vinyl chloride	<100
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	<100
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	<100
Tetrachloroethene	<100

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	Standard Press, PO M03738
Date Extracted:	02/26/09	Lab ID:	090268 mb
Date Analyzed:	02/27/09	Data File:	022706.D
Matrix:	Product	Instrument:	GCMS5
Units:	mg/kg (ppm)	Operator:	MB

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	67	133
Toluene-d8	110	70	130
4-Bromofluorobenzene	109	76	145

Compounds:	Concentration ug/g (ppm)
Vinyl chloride	<100
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	<100
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	<100
Tetrachloroethene	<100

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ENVIRONMENTAL CHEMISTS

Date of Report: 03/09/09
Date Received: 02/26/09
Project: Standard Press, PO M03738, F&BI 902261
Date Extracted: 02/27/09
Date Analyzed: 02/28/09

RESULTS FROM THE ANALYSIS OF PRODUCT SAMPLES FOR PCBs REPORTED AS AROCLORS USING EPA METHOD 8082

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Aroclor 1221	1232	1016	1242	1248	1254	1260	1262	Surrogate (% Rec.) (Limit 49-135)
M03738 902261-01	<2	<2	<2	<2	<2	<2	<2	<2	98
Method Blank	<2	<2	<2	<2	<2	<2	<2	<2	97

Date of Report: 03/09/09
Date Received: 02/26/09
Project: Standard Press, PO M03738, F&BI 902261

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 902261-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Vinyl chloride	mg/kg (ppm)	<100	<100	nm
Chloroethane	mg/kg (ppm)	<100	<100	nm
1,1-Dichloroethene	mg/kg (ppm)	<100	<100	nm
Methylene chloride	mg/kg (ppm)	<500	<500	nm
trans-1,2-Dichloroethene	mg/kg (ppm)	<100	<100	nm
1,1-Dichloroethane	mg/kg (ppm)	<100	<100	nm
cis-1,2-Dichloroethene	mg/kg (ppm)	<100	<100	nm
1,2-Dichloroethane (EDC)	mg/kg (ppm)	<100	<100	nm
1,1,1-Trichloroethane	mg/kg (ppm)	<100	<100	nm
Trichloroethene	mg/kg (ppm)	<100	<100	nm
Tetrachloroethene	mg/kg (ppm)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	500	122	120	70-130	2
Chloroethane	mg/kg (ppm)	500	95	98	70-130	3
1,1-Dichloroethene	mg/kg (ppm)	500	109	101	70-130	8
Methylene chloride	mg/kg (ppm)	500	96	93	70-130	3
trans-1,2-Dichloroethene	mg/kg (ppm)	500	109	113	70-130	4
1,1-Dichloroethane	mg/kg (ppm)	500	111	111	70-130	0
cis-1,2-Dichloroethene	mg/kg (ppm)	500	108	108	70-130	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	500	104	105	70-130	1
1,1,1-Trichloroethane	mg/kg (ppm)	500	116	116	70-130	0
Trichloroethene	mg/kg (ppm)	500	108	108	70-130	0
Tetrachloroethene	mg/kg (ppm)	500	108	107	70-130	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/09/09
Date Received: 02/26/09
Project: Standard Press, PO M03738, F&BI 902261

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082

Laboratory Code: 902261-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<2	<2	nm
Aroclor 1260	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	25	87	92	60-151	6
Aroclor 1260	mg/kg (ppm)	25	94	97	52-147	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - The sample was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j -- The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of diesel.

y - The pattern of peaks present is not indicative of motor oil.

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Project #: 902261

Date Received: 02/26/09
Date Reported: 3/ 5/09

AMTEST Identification Number 09-A003495
Client Identification M03738
Sampling Date 02/26/09, 10:00
All results reported on an as received basis.

Glycols

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Ethylene Glycol MHE	< 900	mg/l			NIOSH 5523m	MO	03/05/09
Diethylene Glycol	5700	mg/l			NIOSH 5523m	MO	03/05/09
Propylene Glycol	< 900	mg/l			NIOSH 5523m	MO	03/05/09

Aaron W. Young
Laboratory Manager

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

DUPLICATE

March 9, 2009

INVOICE #09ACU0309-1

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Standard Press, PO M03738, F&BI 902261 - Results of testing requested by Gerry Thompson for material submitted on February 26, 2009.

1 sample analyzed for PCBs by Method 8082 @ $90 per sample	$ 90.00
1 sample analyzed for Chlorinated Volatiles by Method 8082 @ $129 per sample	129.00
Rush Charges (4 day) 50% of $219.00	109.50
1 sample analyzed for Ethylene Glycol (expedited) by Method 8015 @ $120 per sample	120.00
Amount Due	$ 448.50

FEDERAL TAX ID #(b) (6)

902261

SAMPLE CHAIN OF CUSTODY

ME 2/26/09

D02

Send Report To Geneva Thorpe

Company ALASKAN COPPER WORKS

Address 628 S. Hanford St

City, State, ZIP Seattle WA 98134

Phone #206-571-6033 Fax # 206-382-4539

SAMPLERS (signature)

PROJECT NAME/NO. STANDARD PRESS

PO # M03738

REMARKS

Page # _____ of _____

TURNAROUND TIME

☐ Standard (2 Weeks)

☒ RUSH 1A 5DP

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	PCB	Glycols	Chlorinated Sha			Notes
M03738	01	2/26/09	1000	Oil	1							X	X	X			

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Geneva Thorpe	ACW	2/26/09	2:13 PM
Received by:		Nhan Phan	FEBI	2/	
Relinquished by:					
Received by:					

Samples received at 16 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

AKC-0005808

FRIEDMAN & BRUYA, INC.

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March 9, 2009

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 26, 2009 from the Standard Press, PO M03738, F&BI 902261 project. There are 6 pages included in this report. The sample was sent to Amtest for Glycol analysis. Review of the enclosed report indicates that all quality assurance was acceptable.

Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
ACU0309R.DOC